

SHIP: USS LASALLE (AGF-3) ITEM NO: 255-90-001

COAR: 16-537 PCN: NONE

CMP: NONE

SURVEYOR: BETTS  
MCDONALD  
ROBERSON  
HARRELL

1. SCOPE:

1.1 Title: (S/A AGF-5121K) Main Feed Booster Pumps Replacement;  
accomplish (P-1 Piping)

1.2 Location of Work:

1.2.1 Throughout the Ship

1.3 Identification:

1.3.1 Not Applicable

2. REFERENCES:

- a. Standard Items
- b. 208-7542848, Main Feed Booster Pumps Replacement
- c. 113-7540257, S/A 5121K AGF-3 Fdns Mn Feed Bstr Pump Repl
- d. 208-7542850, AGF3-5121K Installation of Main Feed Booster Pump Replacement
- e. 302-7542928, Shipalt AGF-5121K AGF-03 Power System Modification Main Feed Booster Pump Replacement
- f. 810-4714432 Rev G, NNSY Standard Drawing, Std Pipe Hangers Fabrication Dets & Instl Instr (Non-Nuc Constr)
- g. 605-4721371 Rev B, NNSY Label Plate Standards
- h. S9086-GX-STM-020/CH-220, Volume 2, Boiler Water/Feedwater-Test and Treatment
- i. S9086-RK-STM-010/CH-505, Piping Systems
- j. LAR 512K/AGF-3/076

SHIP: USS LASALLE (AGF-3)

3. REQUIREMENTS:

3.1 Accomplish the requirements of 2.b through 2.e, and 2.j, using 2.f through 2.i for guidance.

3.1.1 Chip and grind surfaces flush in way of repairs.

3.2 Accomplish the requirements of 009-12 of 2.a, including Table One, Columns A and B, Lines One through 10, and Table 3, Column A, Lines One through 7.

3.2.1 Accomplish non-destructive testing in accordance with Line 14.

3.3 Isolate components subject to damage and clean the new and disturbed piping systems to a cleanliness level that results in the internal surfaces being cleaned free of contamination and any remaining residue on the surface does not interfere with the operation of or damage system components.

3.4 Accomplish the requirements of 009-71 of 2.a for new and disturbed waste water drain and fresh water drain piping.

3.5 Accomplish the requirements of 009-71 of 2.a for new and disturbed Feedwater suction piping, feedwater discharge piping, automatic boiler feedwater treatment system piping, and gland seal piping.

3.5.1 Test pressures shall be as follows, using feedwater conforming to Paragraphs 220-22.16 through 220-22.22 of 2.h, when the hydrostatic test option is selected.

3.5.1.1 Feedwater suction piping at 50 PSIG.

3.5.1.2 Feedwater discharge piping at 168 PSIG.

3.5.1.3 Automatic boiler treatment system piping at 1337 PSIG.

3.5.1.4 Gland seal piping at 50 PSIG.

3.6 Accomplish the requirements of 009-71 of 2.a for new and disturbed auxiliary sea water cooling piping, distilled water piping, and chilled water piping.

3.6.1 Test pressures shall be as follows, using clean, fresh water, when the hydrostatic test option is selected.

3.6.1.1 Auxiliary sea water piping at 54 PSIG.

3.6.1.2 Distilled water piping at 88 PSIG.

SHIP: USS LASALLE (AGF-3)

3.6.1.3 Chilled water piping at 115 PSIG.

3.7 Accomplish the requirements of 009-32 of 2.a for the new and modified normally painted surfaces.

3.8 Mark and identify the new and disturbed piping systems in accordance with Paragraph 505-7.8 of 2.i.

(V) (G) "OPERATIONAL TEST"

3.9 Test the new and disturbed piping systems under operating conditions.  
Allowable leakage: None.

(V)(G) "OPERATIONAL TEST"

3.10 Accomplish an operational test for the newly installed Main Feed Booster Pumps for 2 continuous hours and under normal operational conditions. Measure and record the following information after all parameters have stabilized:

3.10.1 Temperatures

3.10.2 Pressures

3.10.3 Allowable leakage: None.

3.10.4 Submit one legible copy, in hard copy or electronic media, of a report listing results of the requirements of 3.10 through 3.10.3 to the SUPERVISOR.

4. NOTES:

4.1 None.

SHIP: USS LASALLE (AGF-3)

5. GOVERNMENT FURNISHED MATERIAL (GFM) :

		NAME OF PART/ QTY      UI    DESCRIPTION	PIECE REF. NO.	NATIONAL NO.	STOCK NO.	PARA NO.
5.1		PUSH MATERIAL:				
1.		None.				
5.2		KITTED MATERIAL:				
1.		None.				
5.3		LLTM:				
1.	8	Ft. 4 Inch IPS Tubing, CUNI, 90/10, 4.500 OD x 0.109 Thk., MIL-T-16420	P-1	2.b	9C4710006047942	3.1
2.	2	Ft. 3 Inch IPS Tubing, Cuni, 90/10, 3.500 OD x 0.095 Thk., MIL-T-16420	P-2	2.b	9C4710006047978	3.1
3.	60	Ft. 3/4 Inch IPS Tubing, CUNI, 90/10, 1.050 OD x .065 Thk., MIL-T-16420	P-3	2.b	9C4710002774656	3.1
4.	50	Ft. 1/2 Inch IPS Tubing, CUNI, 90/10, 0.840 OD x .065 Thk., MIL-T-24107	P-4	2.b	9C4710002774655	3.1
5.	50	Ft. 1/4 Inch IPS Tubing, CUNI, 90/10, 0.540 OD x .065 Thk., MIL-T-24107	P-5	2.b	9C4710002774653	3.1
6.	5	Ft. 10 Inch IPS Tubing, CUNI, 90/10, 10.750 OD x 0.187 Thk., MIL-T-16420	P-6	2.b	9C4710006048099	3.1
7.	6	Ft. 6 Inch IPS Tubing, CUNI, 90/10, 7.625 OD x 0.134 Thk., MIL-T-16420	P-7	2.b	9C4710006048027	3.1

SHIP: USS LASALLE (AGF-3)

8.	2	Ft. 5 Inch IPS Tubing, CUNI, 90/10, 5.563 OD x 0.125 Thk., MIL-T-16420	P-8	2.b	0C4710006047989	3.1
9.	10	Ft. 1-1/2 Inch IPS Tubing, CUNI, 70/30, 1.900 OD X .072 Thk. MIL-T-16420	P-9	2.b	9C4710002897993	3.1
10.	4	Ft. 2 Inch IPS Tubing, CUNI, 90/10, 2.375 OD x 0.83 Thk., MIL-T-16420	P-10	2.b	9C4710002898006	3.1
11.	4	Ea. 3/4 Inch Valve, Globe Stop-Check, SBUE, Bronze	V-1	2.b	9C4820001849185	3.1
12.	4	Ea. 1/2 Inch valve, Globe, SBUE, Bronze	V-2	2.b	9C4820004971686	3.1
13.	8	Ea. 1/4 Inch Gate Valve, SBUE, Bronze,	V-3	2.b	9C4820004956213	3.1
14.	4	Ea. 4 Inch Valve, Swing Check, 150 LB, Flanged, Bronze	V-4	2.b	9C4820000869540	3.1
15.	8	Ea. 4 Inch Valve, Gate, 150 LB, Flanged, Bronze	V-5	2.b	9C4820002779851	3.1
16.	4	Ea. 3/4 Inch Valve, Gate, SBUE, Bronze	V-6	2.b	9C4820004971677	3.1
17.	4	Ea. 4 Inch IPS Flange, 150 LB, Flat Face, SWLDG, 90/10 CUNI	F-1	2.b	_____	3.1
18.	48	Ea. 5/8 Inch,Bolt Hex, 11UNC-2A x 2-1/2 Long, NCA	F-2	2.b	_____	3.1
19.	48	Ea. 5/8 Inch Nut, Hex, 11UNC-2B, NCA	F-3	2.b	_____	3.1
20.	25	Sq Ft. 1/8 Inch Gasket, Sheet, Nitrile	F-4	2.b	_____	3.1

SHIP: USS LASALLE (AGF-3)

21.	28	LF. Angle Structural 4"x4"x3/8" (OSS)	1	2.c	9520009545656	3.1
22.	1	SF. Plating 15.3# (OSS) MIL-S-22698	2	2.c	9515001533223	3.1
23.	28	LF. Flat Bar Structural 4" x 5/8" (OSS) MIL-S-22698	3	2.c	9510001891634	3.1
24.	32	EA. Bolt, Hex Head, Monel 1"-8UNC-2A x 2-3/4 Inch Long	4	2.c	5305002269238	3.1
25.	32	EA. Nut, Hex Head, Monel Slf Lkg, 1"x8UNC-3B	5	2.c	5310002057844	3.1
26.	32	EA. Washer, Flat 1" CRES	6	2.c	5310010063918	3.1
27.	4	Ea. 3 Inch Flange, 150 LB, Flat Face, 90/10 CNA, SWLDG	F-5	2.b	_____	3.1
28.	4	Ea. 6 Inch IPD Elbow, 45 Degree, 90/10 CNA, BTWLD	F-6	2.b	_____	3.1
29.	1	Ea. 1 Inch x 1/2 Inch x 1/2 Inch IPS Reducing Tee, Sil-Braze, Bronze	F-7	2.b	_____	3.1
30.	1	Ea. 2 Inch IPS Coupling, Sil-Braze, Bronze	F-8	2.b	_____	3.1
31.	1	Ea. 10 Inch IPS Flange, Coml, 150 LB, 90/10 CNA, SWLDG	F-9	2.b	_____	3.1
32.	4	Ea. 6 Inch x 4 Inch IPS Reducer, Concentric, 90/10 CNA, BTWLD, Sim to Premier Copper and Brass P/N 88150698	F-10	2.b	_____	3.1
33.	1	Ea. 5 Inch X 4 Inch IPS Reducer, Concentric, 90/10 CNA, BTWLD, Sim to premier Copper and Brass P/N 88150649	F-11	2.b	_____	3.1

SHIP: USS LASALLE (AGF-3)

34.	16	Ea. 1/2 Inch Bolt, Hex Head, 13UNC-2A x 2 Inches Long, NCA	F-12	2.b	_____	3.1
35.	16	Ea. 1/2 Inch Nut, Hex Head, 13UNC-2B, CNA	F-13	2.b	_____	3.1
36.	28	Ea. Label Plates DO NOT ORDER	F-14	2.b	_____	3.1
37.	4	Ea. 4 Inch IPS Elbow, 90 Degree, Long Radius, 90/10 CNA, BTWLD	F-15	2.b	_____	3.1
38.	4	Ea. 3/4 inch IPS Boss, 90/10 CNA, Weld x Sil-Braze	F-16	2.b	_____	3.1
39.	2	Ea. 10 Inch Cap, 90/10 CNA, BTWLD	F-17	2.b	_____	3.1
40.	4	Ea. 3/4 Inch x 1/4 Inch IPS Bushing, Bronze, Sil-Braze	F-18	2.b	_____	3.1
41.	4	Ea. 4 Inch x 3 Inch IPS Elbow, reducing 90 Degree, 90/10 CNA, BTWLD	F-19	2.b	_____	3.1
42.	6	Ea. 3/4 Inch IPS Coupling, Bronze, Sil-Braze	F-20	2.b	_____	3.1
43.	4	Ea. 3/4 inch IPS Union, Bronze, Sil-Braze	F-21	2.b	_____	3.1
44.	2	Ea. 1 inch Cap, Bronze, Sil-Braze	F-22	2.b	_____	3.1
45.	2	Ea. 1 Inch x 1/2 Inch Coupling, Reducing, Bronze, Sil-Braze	F-23	2.b	_____	3.1
46.	4	Ea. 1/4 Inch IPS Adapter, Male Thread x Sil- Braze, Bronze	F-24	2.b	_____	3.1

SHIP: USS LASALLE (AGF-3)

47.	4	Ea. 3/4 Inch IPS Tee, Bronze, Sil-Braze	F-25	2.b	_____	3.1
48.	8	Ea. 6 Inch IPS Flange, 150 LB Coml, Flat Face, 90/10 CNA, SWLDG	F-26	2.b	_____	3.1
49.	4	Ea. 1/4 Inch IPS Union, Bronze, Sil-Braze	F-27	2.b	_____	3.1
50.	8	Ea. 1/4 Inch IPS coupling, bronze, Sil-Braze	F-28	2.b	_____	3.1
51.	4	Ea. 1/4 Inch IPS Elbow, 90 degree, Bronze, Sil-Braze	F-29	2.b	_____	3.1
52.	8	Ea. 3/4 Inch IPS Flange, 150 LB Navy, Bronze, Sil-Braze	F-30	2.b	9C4730006406832	3.1
53.	1	Ea. 1 Inch x 3/4 Inch x 3/4 Inch IPS Tee, Reducing, Bronze, Sil-Braze	F-31	2.b	_____	3.1
54.	4	Ea. 1/2 Inch IPS Elbow, 90 Degree, Bronze, Sil-Braze	F-32	2.b	_____	3.1
55.	4	Ea. 1-1/2 Inch IPS Coupling, Bronze, Sil-Braze	F-33	2.b	_____	3.1
56.	1	Ea. 5 Inch x 5 Inch x 2 Inch IPS Tee, Reducing, 90/10 CNA, BTWLD	F-34	2.b	_____	3.1
57.	1	Ea. 5 Inch x 4 Inch IPS Elbow, 90 Degree, 90/10 CNA, BTWLD	F-35	2.b	_____	3.1
58.	3	Ea. 1-1/2 Inch IPS Boss, Weld x Sil-Braze, 90/10 CNA	F-36	2.b	_____	3.1

SHIP: USS LASALLE (AGF-3)

59.	5	Ea. 1/4 Inch IPS Boss, Weld x Sil-Braze, 90/10 CNA	F-37	2.b	_____	3.1
60.	12	Ea. 7/8 Inch Bolt-Stud, 9UNC-2A x 3-1/2 Inches Long, Monel	F-38	2.b	_____	3.1
61.	12	Ea. 7/8 Inch Nut, Hex, 9UNC-2B, Monel	F-39	2.b	_____	3.1
62.	1	Ea. 1-1/4 Inch IPS Boss, Weld x Sil-Braze, 90/10 CNA	F-40	2.b	_____	3.1
63.	1	Ea. 4 Inch x 2 Inch IPS Elbow, 90 Degree, Reducing, Bronze, BTWLD	F-41	2.b	_____	3.1
64.	4	Ea. 1/2 Inch x 1/4 Inch IPS Bushing, Bronze, Sil-Braze	F-42	2.b	_____	3.1
65.	2	Ea. 2 Inch IPS Elbow, 90 Degree, Bronze, Sil-Braze	F-43	2.b	_____	3.1
66.	4	Ea. 6 Inch Expansion Joint, Flanged, Coml, 150 LB, Flat Face, Sim to Pathway, P/N 6 CH FF 50 12L M6	F-44	2.b	_____	3.1
67.	30	Ea. 3/4 Inch IPS Elbow, 90 Degree, Bronze, Sil-Braze	F-45	2.b	_____	3.1
68.	9	Ea. 3/4 Inch IPS Elbow, 45 Degree, Bronze, Sil-Braze	F-46	2.b	_____	3.1
69.	1	Ea. 3/4 Inch Cap, Bronze, Sil-Braze	F-47	2.b	_____	3.1
70.	16	Ea. 4 Inch IPS Flange, 150 LB, Navy, 90/10 CNA, SWLDG	F-48	2.b	_____	3.1

SHIP: USS LASALLE (AGF-3)

71.	224	Ea. Bolt, Hex head, 1/2 Inch, 13UNC-2A x 2 Inches Long, NCA	F-49	2.b	_____	3.1
72.	224	Ea. Nut, Hex, 1/2 Inch, 13UNC-2B, NCA	F-50	2.b	_____	3.1
73.	3	EA. 1-1/2 Inch IPS Elbow, 45 Degree, Bronze, Sil-Braze	F-51	2.b	_____	3.1
74.	1	Ea. 1-1/2 Inch IPS Elbow, 90 Degree, Bronze, Sil-Braze	F-52	2.b	_____	3.1
75.	2	Ea. 5 Inch x 5 Inch x 4 Inch Tee, Reducing, 90/10 CNA, BTWLD	F-53	2.b	_____	3.1
76.	2	Ea. 5 Inch IPS Coupling, Slip-On 90/10 CNA	F-54	2.b	_____	3.1
77.	1	Ea. 4 Inch IPS Tee, 90/10 CNA, BTWLD	F-55	2.b	_____	3.1
78.	4	SF. 1/8 Inch Thick Orifice Plate, Monel, MIL-Spec QQ-N-281	F-56	2.b	_____	3.1
79.	4	Ea. 5 Inch IPS Sleeve, Slip-On, 90/10 CNA, welded, Sim to Premier copper and Brass P/N 88000650	F-57	2.b	_____	3.1
80.	14	Ea. 4 Inch IPS Sleeve, Slip-On, 90/10 CNA, Welded, Sim to Premier Copper and Brass, P/N 88000600	F-58	2.b	_____	3.1
81.	2	Ea. 10 Inch IPS Sleeve, Slip-On, 90/10 CNA, Welded, Sim to Premier Copper and Brass, P/N 88000800	F-59	2.b	_____	3.1

SHIP: USS LASALLE (AGF-3)

82.	2	Ea. 3 Inch IPS Sleeve, Slip-On, 90/10 CNA, Welded, Sim to Premier Copper and Brass, P/N 88000500	F-60	2.b	_____	3.1
83.	4	Ea. 6 Inch IPS Sleeve, Slip-On, 90/10 CNA, Welded, Sim to Premier Copper and Brass, P/N 88000700	F-61	2.b	_____	3.1
84.	64	Ea. 3/4 Inch Bolt, Hex Head, 10UNC-2A X 3 Inches Long, Monel	F-62	2.b	_____	3.1
85.	64	Ea. 3/4 Inch Nut, Hex, 10UNC-2B, Monel	F-63	2.b	_____	3.1
86.	2	Ea. 4 Inch Pipe Hanger Assembly, Double Leg	____	____	9C5340LLL990076	3.1
87.	2	Ea. 3 Inch Pipe hanger Assembly, Double Leg	____	____	9C5340LLL990074	3.1
88.	10	Ea. 3/4 Inch Pipe Hanger Assembly, Single Leg	____	____	9C5340LLL990053	3.1
89.	9	Ea. 1/2 Inch Pipe Hanger Assembly, single Leg	____	____	9C5340LLL990082	3.1
90.	9	Ea. 1/4 Inch Pipe Hanger Assembly, Single Leg	____	____	9C5340LLL990080	3.1
91.	2	Ea. 6 Inch Pipe Hanger Assembly, Double Leg	____	____	9C5340LLL990078	3.1
92.	2	Ea. 5 Inch Pipe Hanger Assembly, Double Leg	____	____	9C5340LLL990077	3.1
93.	2	Ea. 1-1/2 Inch Pipe Hanger Assembly, Double Leg	____	____	9C5340LLL990071	3.1
94.	2	Ea. 2 Inch Pipe Hanger Assembly, Double Leg	____	____	9C5340LLL990072	3.1
95.	8	Ea. Overload Heaters	One	2.e	9N5999003832290	3.1
96.	4	Ea. Stuffing Tube	2	2.e	9G5975002964093	3.1

SHIP: USS LASALLE (AGF-3)

97.	4	Ea. Insert Kit	3	2.e	9Z5330002022589	3.1
98.	400	Ea. Cable, Type LSTSGU-4	---	2.e	9N6145012019498	3.1
99.	4	Ea. Pump,/Motor and Adapter --- 10 HP, 1750 RPM, Size 3x4x10, Model LD-17 Similar or equal to Chesterton/Blackmer Co. (DO NOT ORDER)	---	2.d	-----	3.1